

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013421**Date Inspected:** 25-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

TRIAL ASSEMBLY YARD

ULTRASONIC INSPECTION

CROSS BEAM # 13

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of OBG components previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3 and Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension Procedure. Rejectable indications were observed. Weld identification numbers were.

CB202A-013-005 (CB13- BP to SP, East side)

CB202A-013-017 (CB13- BP to SP, West side)

This QA Inspector performed conventional UT (Ultrasonic Testing) after ABF UT department for detection of planar transverse indication. For more information refer the ABF /CT report dated on 04/24/2010 & 04/25/2010.

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ULTRASONIC INSPECTION

OBG SEGMENT 10AW

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of OBG components previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3 and Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension Procedure. Inspection was carried out on repair areas. Weld identification numbers were.

SEG059*-039 (10AW, DP to EP, C.B side)

This QA Inspector performed conventional UT (Ultrasonic Testing) after ABF UT department for detection of planar transverse indication.

No relevant indications were observed.

OBG SEGMENT 10CW

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10% of OBG components previously accepted by ZPMC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3 and Detection of Transverse Planar Discontinuities with Significant Flaw Height Dimension Procedure. Inspection was carried out on repair areas. Weld identification numbers were.

SEG063*-037 (10CW, DP to EP, C.B side)

This QA Inspector performed conventional UT (Ultrasonic Testing) after ABF UT department for detection of planar transverse indication.

No relevant indications were observed.

This QA Inspector randomly observed the following work in progress.

OBG SEGMENT 8AE-8BE

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 067765, 054467, 067092 performing Shielded Metal Arc Welding process for weld OBE8B-002 located on PCMK. side panel splice weld between OBG segment 8AE and 8BE (cross beam side) . ZPMC QC Mr. Liu Hu ajie monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 067572 performing Shielded Metal Arc Welding process for weld OBE8B-001 located on PCMK. side panel splice weld between OBG segment 8AE and 8BE (cross beam side). ZPMC QC Mr. Liu Hu ajie monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1.

OBG SEGMENT 7CW-7DW

This Quality Assurance (QA) Inspector observed ZPMC qualified welders 045270 and 045265 performing Submerged Arc Welding process for weld OBW7A-003 located on PCMK. Deck panel splice weld between OBG

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segment 7CW and 7DW. ZPMC QC Mr. Wang Zu monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-223(2)1T-2.

OBG SEGMENT 7CW-7DW

This Quality Assurance (QA) Inspector observed ZPMC QA Inspector performing magnetic particle inspection on the weld between longitudinal diaphragm and bottom panel (counter weight side). See attached photo.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By: Utekar,Shrikant

Quality Assurance Inspector

Reviewed By: Dawson,Paul

QA Reviewer
